

CLAIMING LISTING

The status of the claims is as follows:

1. (previously presented) A method, comprising:
 - (a) forming a preblend comprising:
 - (i) a diluent polyester,
 - (ii) a polyamide material, and
 - (iii) an oxygen scavenging material;
 - (b) providing a base polyester;
 - (c) introducing the preblend of step (a) and the base polyester of step (b) into a molding apparatus to permit melting and admixing of the preblend and the base polyester;
 - (d) injection molding or extruding the admixture of step (c) in the apparatus to provide a preform; and
 - (e) expanding the preform of step (d) to provide a plastic container having a barrier layer formed from the admixture of step (c);
 - (f) wherein the plastic container is stable during unfilled storage and the barrier layer has an oxygen scavenging property that is activated after filling the container with an aqueous fluid.
2. (original) The method of claim 1 wherein the plastic container is a multilayer plastic container.
3. (original) The method of claim 1 wherein the plastic container is a monolayer plastic container.
4. (cancelled)

5. (previously presented) The method of claim 1 wherein the preblend of step (a) has a greater stability after storage for six months at 25°C and 40% relative humidity than a blend containing only a polyamide material and an oxygen scavenging material stored under identical storage conditions.

6. (original) The method of claim 1 wherein the preblend is in a form of solid particles.

7. (original) The method of claim 1 wherein the diluent polyester is present in the preblend in an amount of about 25% to about 75%, by weight of the preblend.

8. (original) The method of claim 1 wherein the diluent polyester comprises a homopolymer or a copolymer of a polyethylene terephthalate, a polyethylene naphthalate, a polybutylene terephthalate, a cyclohexane dimethanol/polyethylene terephthalate copolymer, or a mixture thereof.

9. (previously presented) The method of claim 7 wherein the base polyester is a virgin bottle grade polyester and the admixture of step (c) consists essentially of the base polyester and the preblend.

10. (original) The method of claim 1 wherein the polyamide material is present in the preblend in an amount of about 25% to about 75%, by weight of the preblend.

11. (previously presented) The method of claim 9 wherein the polyamide material comprises a polymer containing m-xylylenediamine monomer units, p-xylylenediamine monomer units, or a mixture thereof.

12. (previously presented) The method of claim 9 wherein the polyamide material comprises a polymerization product of m-xylylenediamine and adipic acid.

13. (original) The method of claim 1 wherein the oxygen scavenging material is present in the preblend in an amount of about 20 to about 2000 parts per million, by weight.

14. (previously presented) The method of claim 13 wherein the oxygen scavenging material comprises a transition metal, or a complex or a salt thereof, selected from the first, second, or third transition metal series of the periodic table.

15. (previously presented) The method of claim 13 wherein the oxygen scavenging material is selected from the group consisting of cobalt, iron, nickel, copper, manganese, and mixtures thereof, or a salt or complex thereof.

16. (original) The method of claim 1 wherein the preblend comprises about 30% to about 70%, by weight, of a diluent polyester comprising a polyethylene terephthalate, a polyethylene naphthalate, or a mixture thereof; about 30% to about 70%, by weight, of an aromatic polyamide material; and about 50 to about 1500 ppm, by weight, of an oxygen scavenging material comprising a salt or a complex of cobalt.

17. (original) The method of claim 1 wherein the base polyester is in a form of solid particles.

18. (previously presented) The method of claim 9 wherein the preblend and the base polyester are admixed in an amount of about 0.5% to about 20%, by weight, of the preblend, and about 80% to about 99.5%, by weight, of the base polyester.

19. (previously presented) The method of claim 9 wherein the base polyester is selected from the group consisting of a polyethylene terephthalate, a polynaphthalene terephthalate, a polybutylene terephthalate, a cyclohexane dimethanol/polyethylene terephthalate copolymer, or a mixture thereof.

20. (previously presented) The method of claim 1 wherein the base polyester comprises a virgin bottle grade polyethylene terephthalate, a post consumer grade polyethylene terephthalate, or a mixture thereof.

21. (original) The method of claim 1 wherein the preform contains about 10 to about 80 ppm, by weight, of the oxygen scavenging material.

22-24. (cancelled).

25. (previously presented) The method of claim 1, further comprising:
activating the oxygen scavenging property of the barrier layer by filling the plastic container with the aqueous fluid.

26. (previously presented) The method of claim 1, wherein the plastic container has an oxygen permeability of 0.035 cc O₂/package/day or less after filling with water for 48 hours.

27. (previously presented) A method, comprising:

- (a) forming a preblend comprising:
 - (i) a diluent polyester,
 - (ii) a polyamide material, and
 - (iii) an oxygen scavenging material;
- (b) providing a virgin bottle grade base polyester;
- (c) introducing the preblend of step (a) and the base polyester of step (b) into a molding apparatus to permit melting and admixing of the preblend and the base polyester to form an admixture that consists essentially of the preblend and the virgin bottle grade base polyester;
- (d) injection molding or extruding the admixture of step (c) in the apparatus to provide a preform; and
- (e) expanding the preform of step (d) to provide a plastic container having a barrier layer formed from the admixture of step (c);
- (f) wherein the plastic container has an oxygen permeability in cc O₂/package/day after filling with water for 48 hours, that is less than the oxygen permeability of the container prior to filling with water.

28. (previously presented) The method of claim 27, wherein the preblend comprises:
about 30% to about 70%, by weight, of the diluent polyester comprising a
polyethylene terephthalate, a polyethylene naphthalate, or a mixture thereof;
about 30% to about 70%, by weight, of the polyamide material comprising an
aromatic polyamide material; and
about 50 to about 1500 ppm, by weight, of the oxygen scavenging material comprising
a transition metal, or a complex or a salt thereof.
29. (previously presented) The method of claim 9, wherein the preblend comprises:
about 30% to about 70%, by weight, of the diluent polyester;
about 30% to about 70%, by weight, of an aromatic polyamide material; and
about 50 to about 1500 ppm, by weight, of the oxygen scavenging material.
30. (previously presented) The method of claim 9, wherein the base polyester is a virgin
bottle grade polyethylene terephthalate.
31. (previously presented) A method, comprising:
- (a) forming a preblend comprising:
 - (i) a diluent polyester,
 - (ii) a polyamide material, and
 - (iii) an oxygen scavenging material;
 - (b) providing a base polyester;
 - (c) introducing the preblend of step (a) and the base polyester of step (b) into a
molding apparatus to permit melting and admixing of the preblend and the
base polyester;
 - (d) injection molding or extruding the admixture of step (c) in the apparatus to
provide a monolayer preform; and
 - (e) expanding the monolayer preform of step (d) to provide a monolayer plastic
container that is stable during unfilled storage and has an oxygen scavenging
property that is activated when the container is filled with an aqueous fluid.

32. (previously presented) The method of claim 31, wherein the preblend comprises:
- about 30% to about 70%, by weight, of the diluent polyester comprising a polyethylene terephthalate, a polyethylene naphthalate, or a mixture thereof;
 - about 30% to about 70%, by weight, of the polyamide material comprising an aromatic polyamide material; and
 - about 50 to about 1500 ppm, by weight, of the oxygen scavenging material comprising a transition metal, or a complex or a salt thereof.
33. (previously presented) The method of claim 9, wherein the oxygen scavenging material is present in the preblend in an amount of about 100 to about 1,000 parts per million, by weight of the preblend.